The owner shall keep the original of each month's record at the facility and send a copy of it to the appropriate Regional office of the FAA.

- (d) [Reserved]
- (e) VOR ground check error data (Forms FAA-2396 and 2397). To contain results of the monthly course accuracy ground check in accordance with FAA Handbook AF P 6790.9 "Maintenance Instructions for VHF Omniranges". The owner shall keep the originals in the facility and send a copy of each form to the appropriate Regional office of the FAA on a monthly basis.

(49 U.S.C. 1348)

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171–5, 34 FR 15245, Sept. 30, 1969; Amdt. 171–10, 40 FR 36110, Aug. 19, 1975]

Subpart B—Nondirectional Radio Beacon Facilities

§171.21 Scope.

- (a) This subpart sets forth minimum requirements for the approval and operation of non-Federal, nondirectional radio beacon facilities that are to be involved in the approval of instrument flight rules and air traffic control procedures related to those facilities.
- (b) A nondirectional radio beacon ("H" facilities domestically—NDB facilities internationally) radiates a continuous carrier of approximately equal intensity at all azimuths. The carrier is modulated at 1020 cycles per second for station identification purposes.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-2, 31 FR 5408, Apr. 6, 1966; Amdt. 171-7, 35 FR 12711, Aug. 11, 1970]

$\S 171.23$ Requests for IFR procedure.

- (a) Each person who requests an IFR procedure based on a nondirectional radio beacon facility that he owns must submit the following information with that request:
- (1) A description of the facility and evidence that the equipment meets the performance requirements of §171.27 and is installed in accordance with §171.29.
- (2) A proposed procedure for operating the facility.

- (3) A proposed maintenance arrangement and a maintenance manual that meets the requirements of §171.31.
- (4) A statement of intention to meet the requirements of this subpart.
- (5) A showing that the facility has an acceptable level of operational reliability and an acceptable standard of performance. Previous equivalent operational experience with a facility with identical design and operational characteristics will be considered in showing compliance with this subparagraph.
- (b) After the FAA inspects and evaluates the facility, it advises the owner of the results and of any required changes in the facility or the maintenance manual or maintenance organization. The owner must then correct the deficiencies, if any, and operate the facility for an in-service evaluation by the FAA

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171–7, 35 FR 12711, Aug. 11, 1970]

§ 171.25 Minimum requirements for approval.

- (a) The following are the minimum requirements that must be met before the FAA will approve an IFR procedure for a non-Federal, nondirectional radio beacon facility under this subpart:
- (1) The facility's performances, as determined by air and ground inspection, must meet the requirements of §171.27.
- (2) The installation of the equipment must meet the requirements of §171.29.
- (3) The owner must agree to operate and maintain the facility in accordance with §171.31.
- (4) The owner must agree to furnish periodic reports, as set forth in §171.33, and agree to allow the FAA to inspect the facility and its operation whenever necessary.
- (5) The owner must assure the FAA that he will not withdraw the facility from service without the permission of the FAA.
- (6) The owner must bear all costs of meeting the requirements of this section and of any flight or ground inspections made before the facility is commissioned, except that the Federal Aviation Administration may bear certain of these costs subject to budgetary limitations and policy established by the Administrator.

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(b) If the applicant for approval meets the requirements of paragraph (a) of this section, the FAA commissions the facility as a prerequisite to its approval for use in an IFR procedure. The approval is withdrawn at any time the facility does not continue to meet those requirements. In addition, the facility may be de-commissioned whenever the frequency channel is needed for higher priority common system service.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-6, 35 FR 10288, June 24, 1970]

§171.27 Performance requirements.

- (a) The facility must meet the performance requirements set forth in the "International Standards and Recommended Practices, Aeronautical Telecommunications, Part I, paragraph 3.4" (Annex 10 to the Convention on International Civil Aviation), except that identification by on-off keying of a second carrier frequency, separated from the main carrier by 1020 Hz plus or minus 50 Hz, is also acceptable.
- (b) The facility must perform in accordance with recognized and accepted good electronic engineering practices for the desired service.
- (c) Ground inspection consists of an examination of the design features of the equipment to determine (based on recognized and accepted good engineering practices) that there will not be conditions that will allow unsafe operations because of component failure or deterioration.
- (d) Flight tests to determine the facility's adequacy for operational requirements and compliance with applicable "Standards and Recommended Practices" are conducted in accordance with the "U.S. Standard Flight Inspection Manual", particularly section 207. The original test is made by the FAA and later tests shall be made under arrangements, satisfactory to the FAA, that are made by the owner.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171–7, 35 FR 12711, Aug. 11, 1970]

§ 171.29 Installation requirements.

(a) The facility must be installed according to accepted good engineering practices, applicable electric and safe-

ty codes, and FCC licensing requirements.

- (b) The facility must have a reliable source of suitable primary power.
- (c) Dual transmitting equipment may be required to support some IFR procedures
- (d) A facility intended for use as an instrument approach aid for an airport must have or be supplemented by (depending on the circumstances) the following ground-air or landline communications services:
- (1) At facilities outside of and not immediately adjacent to controlled airspace, there must be ground-air communications from the airport served by the facility. Voice on the aid controlled from the airport is acceptable.
- (2) At facilities within or immediately adjacent to controlled airspace, there must be the ground-air communications required by paragraph (d)(1) of this section and reliable communications (at least a landline telephone) from the airport to the nearest FAA air traffic control or communication facility.

Paragraphs (d) (1) and (2) of this section are not mandatory at airports where an adjacent FAA facility can communicate with aircraft on the ground at the airport and during the entire proposed instrument approach procedure. In addition, at low traffic density airports within or immediately adjacent to controlled airspace, and where extensive delays are not a factor, the requirements of paragraphs (d) (1) and (2) of this section may be reduced to reliable communications (at least a landline telephone) from the airport to the nearest FAA air traffic control or communications facility, if an adjacent FAA facility can communicate with aircraft during the proposed instrument approach procedure, at least down to the minimum en route altitude for the controlled airspace area

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171–16, 56 FR 65664, Dec. 17, 1991]

§ 171.31 Maintenance and operations requirements.

(a) The owner of the facility must establish an adequate maintenance system and provide qualified maintenance